REMARKS/ARGUMENTS

The drawings were objected to as failing to show the subject matter in Claims 12-14. Claims 12-14 have been canceled. Therefore, this objection to the drawings should be withdrawn.

Claims 6, 7, and 11-14 were objected to under §112, 2nd paragraph, for various reasons as pointed out by the Examiner. Claims 6, 7 and 11 have been amended to address the Examiner's concerns. Claims 12-14 have been canceled. Therefore, this rejection under §112 should be withdrawn.

Claim 14 was rejected under §101. As mentioned above, Claim 14 has been canceled. Therefore, this rejection should be withdrawn.

Claims 1-8 were rejected under §102 as being anticipated by the later Nixon reference (U.S. Pat. No. 4,086,866, hereinafter referred to as Nixon II).

Applicant respectfully traverses this rejection. Claim 1 has been amended to recite a number of additional structural features. Specifically, Claim 1 has been amended to require that the anchor include the side wall surrounding an interior volume and having top and bottom ends, and a bottom edge of said side wall defining the open bottom. Claim 1 further requires the lower portion of the interior volume to be substantially free of obstruction, and means for retaining sea bed soil provided in an upper portion of the interior volume, the means for retaining sea bed soil being especially adapted to displace, receive and retain a quantity of sea bed soil.

Nixon II discloses an anchoring device that is designed to bury itself vertically into the sea bed. A system of pipes and ports are provided for injecting water under pressure to completely mobilize the sea bed soil below under the device, and then to extract the water and displaced soil in order that the anchoring device might progressively descend below the sea bed

surface. The device apparently relies entirely on its own weight and buried upper surface to provide the desired anchoring effect.

As amended, the claimed means for retaining sea bed soil should be interpreted as a means plus function claim, wherein both the structure and the recited function achieved by the structure must be found in the cited prior art. In the Nixon II reference, the Examiner indicated that the previously claimed soil retaining means corresponded to numbers 41 and 42. As explained in the Nixon II reference at column 6, lines 40-55, reference number 41 corresponds to the annular space 41 located between the sloping sides and the base of the conical portion 13. Reference number 42 corresponds to the apertures 42 provided in the sloping sides of the conical portion 13 to provide fluidic communication between the annular space 41 and the space contained between the conical portion 13 and the skirt portion 11. It is clear from the disclosure in the Nixon II reference that annular space 41 and apertures 42 are not structurally similar to the claimed means for retaining seabed soil and also have no structural function relating to retaining sea bed soil. Furthermore, it is noted that the conical portion 13 in Nixon II has no function relating to retaining sea bed soil and rather, such conical portion is provided for a completely opposite purposes: to displace and remove a quantity of sea bed soil away from the anchoring device. As explained at column 5, lines 49-65, a jet pump 15 fed by a water supply 17 operates to induce a mixture of water bed material and water up the suction passageway 12 to a point where it impinges upon an umbrella-like deflector 16 that deflects the mixture down and over the anchoring device. Within the open space noted by reference number 15, as well as in other locations within the anchoring device shown in Nixon II, sea bed soil is not retained within the device and rather, is deliberately transported through the device. As shown in Figure 3, it is only the sea bed soil that enters through the most lower opening of suction passageway 12, while fluidizing water passes through water supply 17, but the fluidizing water enters the passageway 12 in a venturi-type arrangement, as indicated by the arrows in Figures 1 and 4. Even if the Examiner interprets the seabed soil within the passageway 12 of Nixon II as being some type of structure relating to means for retaining seabed soil, this interpretation is improper since the

motive force of the water along with the moving seabed soil therein actually detract from the weight of the anchor. Thus, at least the function of the passageway 12 is completely opposite of what is claimed. While the overall function or purpose of the Nixon II reference is to provide a sea bed anchor, the structure and function as presently claimed for retaining sea bed soil is simply not found in the Nixon II reference.

The other embodiments in the Nixon II reference are intended to function in the same manner as the first embodiment discussed above. However, none of the embodiments in the Nixon II reference disclose sea bed soil actually being retained within the anchoring device for purposes of assisting in maintaining the anchoring device on the sea bed.

With respect to Claim 8, it is noted that Claim 8 has been amended in independent form to include some of the structural limitations found in Claim 1, most notably, Claim 8 requires the means for retaining sea bed soil. Additionally, the method of Claim 8 requires that the weight of the sea bed soil retained in the means for retaining sea bed soil adds to the force required to pull the embedded anchor out of the sea bed soil. As mentioned above with respect to the mere transfer of soil through the anchor device shown in Nixon II, the method of Claim 8 is clearly distinguishable from the method of Claim 8. There is a clear intent in the Nixon II reference to displace and remove soil away from the interior of the anchoring device by use of the various passageways. Claims 2-6 depend directly or indirectly from Claim1. Claim 7 has been canceled. Therefore, this rejection under §102 should be withdrawn.

Claims 1-3, 6, 7, 8-10, and 12 were rejected under §102 as being anticipated by U.S. Patent No. 3,967,393 to Nixon (hereinafter Nixon I). With respect to Nixon I, it is noted that the embodiment shown in Figures 1-4 correspond to an underwater soil collecting apparatus for harvesting gravel, while Figures 5-8 are the only embodiment that disclose an anchoring apparatus. Regardless of the intended purpose of the invention disclosed in the Nixon I reference, Nixon I fails to disclose at least a caisson having a longitudinal side wall and an open

bottom. Rather, each of the embodiments in Nixon I emphatically disclose closed bottom structures. Each of these structures require all the soil below the anchor device to be mobilized in order for the anchor to be embedded. As shown in Figure 7 of the Nixon I reference, the basic operation of this embodiment is that water must be caused to flow very rapidly through the small apertures 14 in the base of the anchor, while the interior volume causes the fluids to slow down, solid material is deposited within the base. Based upon the basic operation disclosed in this reference, it follows that the anchoring device in Nixon I cannot be interpreted to disclose the claimed open bottom caisson of the present invention. With respect to method Claim 8, it also requires the open bottom caisson in addition to the method steps recited therein. Therefore, for the same reason as set forth above with respect to independent Claim 1, Claim 8 clearly distinguishes over Nixon I.

Independent Claim 15 has been added to further claim the present invention. Specifically, Claim 15 requires a plurality of anchors that define a gravity base. With respect to Claim 15, it is noted that the anchors each require means for retaining sea bed soil and further, that the anchors each have a side wall, and a bottom edge of the side wall defining an open bottom. Therefore, for the same reason as set forth above with respect to Claim1 in view of the Nixon references, Claim 15 should also be allowed. It is further noted in the application that the term "gravity base" has clear antecedent basis in the description at page 4, lines 15-22, and with respect to new independent Claim 15, the gravity base is defined as simply including a plurality of the anchors.

For new independent Claim 16, it is also believed this reference clearly distinguishes over the prior art of record. With respect to the method of this claim, it requires the provision of the means for retaining sea bed soil, as well as an open bottomed caisson. Additionally, the method of Claim 16 requires the sea bed soil to be drawn into the caisson interior such that the sea bed soil remains inside the caisson and rests upon an upper surface of the means for retaining sea bed soil. These basic method steps are simply not taught or suggested in the references of record

considering the structure used to achieve the method steps. Thus, for the same reason as set forth above with respect to provision of the means for retaining sea bed soil and an open bottom caisson, as well as the method step of retaining the sea bed soil on the upper surface of the means for retaining sea bed soil, Claim 16 clearly distinguishes over the prior art of record.

The application now appearing to be in form for allowance, early notification of same is respectfully requested. The Examiner is invited to contact the undersigned by telephone if doing so would expedite the resolution of this case.

Respectfully submitted,

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